

CONSULTANT SUBMITTAL PROCEDURE

Local Sponsor Projects

Sponsors shall make all submittals to the Local Highway Technical Assistance Council (LHTAC), and LHTAC will make distribution to the necessary ITD Sections for review. Two copies of the Drawings should be submitted in 11" x 17" format. Returned transmittals by the Bridge Section will be sent to LHTAC. This procedure is to be used on all projects to include Local Public Agencies (LPA) projects by consultants.

State Consultant Projects

Consultants shall make all submittals to the District Design Section, and the District will make distribution to the necessary ITD Sections for review. Two copies of the Drawings should be submitted 11" x 17" format. Returned transmittals by the Bridge Section will be sent to the District Project Development Engineer.

Submittal Criteria

The following data is required for the various submittals:

Project Concept Report

A Concept Report for the project shall be prepared according to the criteria in the Roadway Design Manual. A bridge concept study shall be developed as required for the Alternate Solutions & Cost. A copy of the approved Concept Report shall be submitted with the TS&L Report. On small projects, the Concept Report and TS&L Report may be combined into one document.

Type, Size & Location Report

A submittal of data is to be made showing the concepts of the structures. Drilling for the foundation investigation for multi-span structures should be delayed until the concept is approved. The data should include:

- Bridge layout showing plan and elevation views
- Bridge cross-section
- Roadway cross-section
- Stream cross-section,
- Vicinity map
- Preliminary profile grade
- Draft Phase 4 Foundation Report (if available)
- Draft ITD-210 hydraulic report (if available)
- Other data pertinent to type or location selection

Show as much of the above data as possible on the layout drawing.

Refer to Article 0.7 for TS&L Report criteria.

Consultants are encouraged to contact the Bridge Section during development of the structure concept.

Final Situation and Layout Review

The plans shall consist of the following:

- Situation and layout. Refer to the Checklist in Chapter 17 of the BDM.
- Foundation investigation sheet
- Sketches or views of unusual structural details

The plans shall also be accompanied by:

- Approved Phase 4 Foundation Report
- Approved ITD-210 Hydraulic Report
- Approved ITD-783 Design Standards forms
- District approved roadway profile and alignment data
- Topographic map with contours

The Bridge Section shall approve the Situation and Layout plans before proceeding with final design.

Intermediate Design Reviews

If needed, these reviews can be handled informally between the Local Public Agency/State Consultant and the Bridge Section.

Final Design Review

The submittal shall include the following:

- Drawings in reproducible form
- Special Provisions
- Cost Estimate
- Quantity Calculations
- Construction Schedule
- Stamped Design Calculations
- Stamped Check Calculations
- Consultant QA/QC Check Lists

Plans, Specifications, Estimates

After the consultant has made the necessary corrections from the Final Design Review, the final drawings and the revised final design data shall be submitted. The Bridge Section will publish a PS&E letter of acceptance. In the transmittal letter the Bridge Section will include an estimate of man-hours for checking shop plans and construction drawings. On Local Sponsor Projects, LHTAC will arrange for a supplemental engineering agreement to cover this additional work.

Plans

The final drawings shall include the following:

- 22"x34" 3 mil mylars stamped by the Engineer
- 11"x17" prints
- Electronic CADD files in .dgn format

The 11"x17" prints should preferably be either photographically reduced or have an electronic stamp.

Design Calculations

- A title page shall have the bridge name, project number, project key number, and drawing number and shall be stamped by an Engineer licensed in Idaho.
- The calculations shall be indexed and pages numbered.
- The calculations shall be prepared on 8½" x11" paper.

Load Rating

Local Sponsor Projects

There is no load rating performed as part of the PS&E submittal. The load rating shall be completed within 45 days of the bridge being opened to traffic. The consultant doing the load rating shall be selected from ITD's Load Rating Term Agreement list. This consultant may or may not be the firm that designed the bridge. The load rating shall include the items listed below.

State Consultant Projects

Initial Load rating shall be performed as part of the PS&E submittal and shall be done in accordance with Article 0.4. Final load rating shall be completed within 45 days of the bridge being opened to traffic.

To maximize the efficiency of its operations, the Department has selected the AASHTOWare Bridge Rating software (BrR formerly known as VIRTIS) for load rating. The BrR software shall be used to do the rating for the structure types listed below. For structure types not listed below, curved girders, or structures with complex geometry, alternate rating software may be used, but needs to be approved in advance by the ITD Asset Management Office.

Coding instructions for the BrR software are in Chapter 6 of the Idaho Manual for Bridge Evaluation.
(<http://itd.idaho.gov/Bridge/IMBEFirstEdition.pdf>)

Structure types that shall be rated in BrR:

- Prestressed girders
- Steel rolled girders, plate girders, or built-up sections
- Reinforced concrete girders
- Timber girders
- Trusses

Load rating submittal shall include:

- The load rating file (no hard copy; electronic copy only)
- Stamped & signed Load Rating Summary Sheet by a State of Idaho Professional Engineer (hard copy)
- Load Rating Summary Sheet (electronic file).

Load Rating on Rehabilitation Projects

When consultants are involved with bridge rehabilitation projects the load rating shall be reviewed and updated as necessary by ITD.

Revisions:

April 2008	Added TS&L Report requirements in Structure Concept Review. Added requirement for Virtis load rating.
July 2009	Added Check Calculations & QA/QC check lists submittal at Final Design.
July 2010	Revised plans, specifications, & estimate submittal section to include updated load rating information.
March 2011	Added Concept Report for project . Renamed "Structure Concept Report" to "TS&L Report".
Feb 2012	Added Design Calculations format requirements Changed reference to Bridge Asset Management Changed reference to District PDE for returning comments on State projects. Changed reference to LHTAC for returning comments on LPA projects.
August 2012	Clarified Load Rating for New Bridges Added Guidance for Load Rating of Bridge Rehabilitation Projects
Sept 2012	Changed "should" to "shall" for the Situation Layout and Final Design Review attachments.
October 2013	Deleted the requirement for Load Rating on Local Sponsor Projects at the PS&E submittal stage. Added requirement for load rating after construction is completed be done by a consultant on the ITD Load Rating Term Agreement list within 180 days of the bridge being opened to traffic. Clarified that the initial load rating on State sponsored projects shall be done at the PS&E submittal stage and final load rating be completed within 90 days of the bridge being opened to traffic. Rehab load rating shall be done by ITD staff.
May 2014	Revised notation of VIRTIS to BrR. Added reference to BrR coding instructions in Chapter 6 of the Idaho Manual for Bridge Evaluation.
March 2015	Final load rating for Local Sponsor projects completion date changed to 45 days after bridge opened to traffic to allow QA/QC process to be completed prior to the 180 day mandated limit. Final load rating for State Sponsor projects completion date changed to 45 days after bridge opened to traffic to allow QA/QC process to be completed prior to the 90 day mandated limit.